## ABSTRACT

A desalination system for removing at least a substantial amount of salt from a saltwater. In at least one embodiment, the desalination system may inject the saltwater with one or more ionized gases for removing contaminants from the saltwater. The desalination system may include one or more ionized gas generators for generating one or more ionized gases to be mixed with the saltwater. The desalination system may inject a disinfectant into the saltwater to disinfect the saltwater. The desalination system may generate one or more disinfectants from saltwater using a disinfectant generator. In at least one embodiment, the disinfectant generator may separate disinfectants from saltwater using electrolysis.